

REMARKS/ARGUMENTS

Claims 1-11 are active in this application.

Two parts of the specification were noted in the Action at page 2 and have been corrected to fix the obvious typographical errors that were present.

The invention as set forth in independent claim 1 is:

1. A process for the continuous preparation of polyether alcohols by reaction of alkylene oxides with H-functional starter substances in the presence of DMC catalysts, which comprises, at the beginning of the process
  - a) firstly placing initial charge material and DMC catalyst in a reactor,
  - b) metering in alkylene oxide so that the metering rate which is maintained for continuous operation of the reactor is reached in a time of from 100 to 3 000 seconds,
  - c) metering in starter substance during or after step b) so that the metering rate which is maintained for continuous operation of the reactor is reached in a time of from 5 to 500 seconds,
  - d) after the fill level in the reactor which is desired for continuous operation of the reactor has been reached, taking product off continuously from the reactor while at the same time metering in starter substance and alkylene oxides in such an amount that the fill level in the reactor remains constant and metering in DMC catalyst so that the catalyst concentration necessary for continuous operation of the reactor is maintained in the reactor.

In the Action, the Examiner states, with little explanation, that the claims of the application are the same as the reaction(s) described in U.S. patent 6,359,101.

This, however, is not accurate because the '101 patent does not discuss a continuous operation for producing polyether alcohols but rather a typical batch reaction.

That is, the '101 patent certainly describes the basic reaction for producing polyether polyols but it when those reactions were performed, catalyst and starter are initially charged into the reactor with "no additional PO" added after the initial charge (see col. 6, lines 51-53 and col. 17, lines 14-16). In instances where PO may have been added after the initial charge, the '101 patent does not meet the metering times required in Claim 1. Indeed, the

'101 patent is not at all concerned with metering rates nor the continuous reaction. Rather, the '101 patent is focused on the molecular weight of starters and OH groups present on the molecules (see col. 5, lines 48-50 and col. 7, lines 32-35).

As discussed in the background section, when preparing polyether alcohols in a continuous operation such as that claimed, a number of problems with heat, poisoning and others (see pages 1-2 of the present application). The inventors have discovered that when the production occurs as is provided in the claims, the start-up of continuous reactors for the preparation of polyether alcohols by addition of alkylene oxides onto H-functional starter substances in such a way that steady-state operation of the reactor can be established quickly without deactivation of the catalyst occurring, even when using low catalyst concentrations (see pages 2-3 of the specification).

Further, as discussed on page 4 of the application: When the times to reach the metering rates in steps b) and c) are less than those specified, damage to the catalyst occurs, probably because of the high temperatures caused by the rapid metered addition and consequently spontaneous reaction of the propylene oxide. When the times specified are exceeded, it takes a long time for conditions in the reactor under which the target product is produced in a consistent quality to be reached, so that out-of-specification product is obtained in the start-up phase. The time until constant conditions have been reached in the reactor is usually reported as the number of residence times required to reach steady-state operation. The residence time is the quotient of reaction volume ( $V$ ) and feed rate (in l/s). The residence time thus corresponds to the mean time for which the molecules are present in the reactor. In the case of reactions in which the volume does not remain constant, the residence time is based on the conditions at the inlet of the reactor.

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Withdrawal of the rejection and a Notice of Allowance are requested.

Respectfully submitted,

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